

*Sub A2* > 3. (amended) The protein of claim 1, comprising the amino acid sequence of SEQ ID NO: 2, fragments thereof, or conservative substitutions thereof that maintain antigenicity.

*Cont A2*  
4. (amended) The protein of claim 1, further comprising a signal peptide polyhistidine, and a T-cell helper epitope.

5. The protein of claim 1, wherein the stages are selected from the group consisting of sporozoite stage, liver stage, blood stage and sexual stage.

6. (new) The protein of claim 5, comprising at least one antigenic epitope from each of the sporozoite, liver, blood, and sexual stages of *Plasmodium falciparum* life cycle.

*Sub F1* 7. (new) An isolated nucleic acid molecule encoding the protein of claim 1.

8. (new) The isolated nucleic acid molecule of claim 7, comprising the nucleotide sequence of SEQ ID NO: 1, fragments thereof, or conservative substitutions thereof that maintain antigenicity.

9. (amended) A method of enhancing an immune response of an animal to *Plasmodium falciparum* comprising administration to the animal of an effective amount of a protein composition comprising the recombinant protein of claim 1 in a pharmaceutically acceptable carrier.

*Sub B3* > 10. (amended) The protein composition of claim 7.

11. (amended) Antibodies immunoreactive to the recombinant protein of claim 1.

*Sub F1* <sup>A3</sup> 12. (amended) Use of the antibodies of claim 11 for simultaneous detection or measurement of peptides derived from two or more stages in a life cycle of *Plasmodium falciparum*.